



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DS-L30-940-DIM-UNV-OW-OF-CS_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20343.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 07/11/2023

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 6"SQ RECESSED LED DOWNLIGHT

[MORE] WHITE MIXING CHAMBER & 6"ALUM SEMI-SPEC TRIM w/FROST FILM

[MORE] 0-10V DIMMING DRIVER

[LUMCAT] 6DS-L30-940-DIM-UNV-OW-OF-CS

[LAMPCAT] BRIDGELUX V13 COB

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Industrial, Office, Direct, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 2371 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 76 |
| Total Luminaire Watts | 31 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 0.88 |
| Spacing Criterion (90-270) | 0.86 |
| Spacing Criterion (Diagonal) | 0.90 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 0.50 ft |
| Luminous Width (90-270) | 0.50 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 11623 | 18031 | 11325 |
| 55 | 1653 | 2939 | 1653 |
| 65 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |

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CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-----------|------------|-------------|-------------|-------------|-------------|
| 0 | 2731.304 | 2731.304 | 2731.304 | 2731.304 | 2731.304 |
| 5 | 2711.707 | 2708.033 | 2694.560 | 2685.986 | 2683.537 |
| 10 | 2567.181 | 2576.979 | 2570.855 | 2552.483 | 2548.809 |
| 15 | 2328.345 | 2336.918 | 2333.244 | 2319.771 | 2311.198 |
| 20 | 2028.269 | 2025.819 | 2036.842 | 2023.370 | 2016.021 |
| 25 | 1625.310 | 1671.852 | 1686.550 | 1649.806 | 1600.814 |
| 30 | 1125.591 | 1173.358 | 1276.242 | 1179.482 | 1135.390 |
| 35 | 668.741 | 774.074 | 917.375 | 743.454 | 652.818 |
| 40 | 384.587 | 422.556 | 573.206 | 405.409 | 378.463 |
| 45 | 191.069 | 226.588 | 296.402 | 230.262 | 186.170 |
| 50 | 77.162 | 94.310 | 122.480 | 91.860 | 75.938 |
| 55 | 22.046 | 30.620 | 39.194 | 31.845 | 22.046 |
| 60 | 2.450 | 3.674 | 8.574 | 3.674 | 1.225 |
| 65 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 70 | 0.000 | 1.225 | 0.000 | 0.000 | 0.000 |
| 75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 80 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 85 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 90 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

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ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 902.16 | N.A. | 38.00 |
| 0-30 | 1648.43 | N.A. | 69.50 |
| 0-40 | 2141.1 | N.A. | 90.30 |
| 0-60 | 2370.09 | N.A. | 99.90 |
| 0-80 | 2371.33 | N.A. | 100.00 |
| 0-90 | 2371.33 | N.A. | 100.00 |
| 10-90 | 2118.23 | N.A. | 89.30 |
| 20-40 | 1238.94 | N.A. | 52.20 |
| 20-50 | 1432.1 | N.A. | 60.40 |
| 40-70 | 230.15 | N.A. | 9.70 |
| 60-80 | 1.24 | N.A. | 0.10 |
| 70-80 | 0.08 | N.A. | 0.00 |
| 80-90 | 0.00 | N.A. | 0.00 |
| 90-110 | 0.00 | N.A. | 0.00 |
| 90-120 | 0.00 | N.A. | 0.00 |
| 90-130 | 0.00 | N.A. | 0.00 |
| 90-150 | 0.00 | N.A. | 0.00 |
| 90-180 | 0.00 | N.A. | 0.00 |
| 110-180 | 0.00 | N.A. | 0.00 |
| 0-180 | 2371.33 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 253.10 |
| 10-20 | 649.06 |
| 20-30 | 746.28 |
| 30-40 | 492.67 |
| 40-50 | 193.16 |
| 50-60 | 35.84 |
| 60-70 | 1.16 |
| 70-80 | 0.08 |
| 80-90 | 0.00 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 94 | 98 | 95 | 92 | 95 | 93 | 90 | 92 | 90 | 89 | 87 |
| 3 | 102 | 96 | 91 | 87 | 100 | 95 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 84 | 87 | 85 | 82 | 81 |
| 4 | 97 | 89 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 |
| 5 | 92 | 84 | 78 | 73 | 90 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 72 | 78 | 74 | 71 | 70 |
| 6 | 87 | 78 | 72 | 68 | 86 | 78 | 72 | 68 | 76 | 71 | 67 | 75 | 70 | 67 | 73 | 70 | 66 | 65 |
| 7 | 83 | 74 | 68 | 63 | 82 | 73 | 67 | 63 | 72 | 67 | 63 | 71 | 66 | 63 | 69 | 65 | 62 | 61 |
| 8 | 79 | 69 | 63 | 59 | 78 | 69 | 63 | 59 | 68 | 62 | 59 | 67 | 62 | 59 | 66 | 61 | 58 | 57 |
| 9 | 75 | 65 | 59 | 55 | 74 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 55 | 53 |
| 10 | 72 | 62 | 56 | 52 | 71 | 61 | 56 | 52 | 61 | 55 | 52 | 60 | 55 | 52 | 59 | 55 | 52 | 50 |

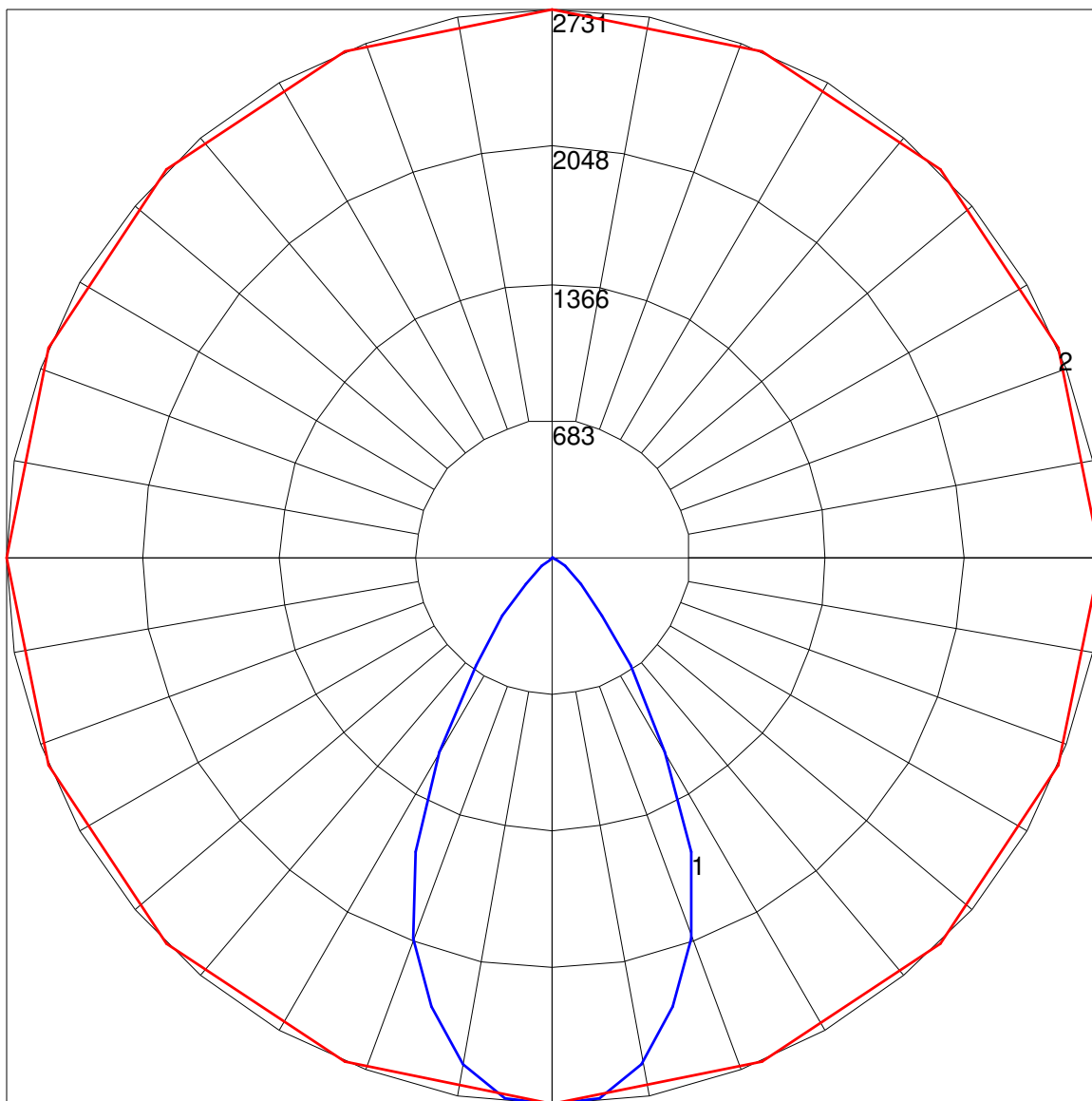
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UGR TABLE - CORRECTED

| | | | | | | | | | | | |
|----------------|------|----------------------|-----|-----|-----|-----|--------------------|-----|-----|-----|-----|
| Reflectances | | | | | | | | | | | |
| Ceiling Cavity | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Walls | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Floor Cavity | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| Room Size | | UGR Viewed Crosswise | | | | | UGR Viewed Endwise | | | | |
| X=2H | Y=2H | 3.0 | 3.4 | 3.0 | 3.8 | 4.1 | 3.0 | 3.6 | 3.0 | 3.9 | 4.2 |
| | 3H | 3.0 | 3.1 | 3.0 | 3.5 | 3.8 | 3.0 | 3.3 | 3.0 | 3.6 | 4.0 |
| | 4H | 3.0 | 3.0 | 3.0 | 3.3 | 3.7 | 3.0 | 3.1 | 3.0 | 3.5 | 3.9 |
| | 6H | 3.0 | 3.0 | 3.0 | 3.2 | 3.6 | 3.0 | 3.0 | 3.0 | 3.3 | 3.7 |
| | 8H | 3.0 | 3.0 | 3.0 | 3.1 | 3.5 | 3.0 | 3.0 | 3.0 | 3.2 | 3.6 |
| | 12H | 3.0 | 3.0 | 3.0 | 3.0 | 3.4 | 3.0 | 3.0 | 3.0 | 3.1 | 3.6 |
| 4H | 2H | 3.0 | 3.0 | 3.0 | 3.3 | 3.7 | 3.0 | 3.1 | 3.0 | 3.5 | 3.9 |
| | 3H | 3.0 | 3.0 | 3.0 | 3.0 | 3.4 | 3.0 | 3.0 | 3.0 | 3.2 | 3.6 |
| | 4H | 3.0 | 3.0 | 3.0 | 3.0 | 3.3 | 3.0 | 3.0 | 3.0 | 3.0 | 3.4 |
| | 6H | 3.0 | 3.0 | 3.0 | 3.0 | 3.2 | 3.0 | 3.0 | 3.0 | 3.0 | 3.3 |
| | 8H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.2 |
| | 12H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.1 |
| 8H | 4H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.2 |
| | 6H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| | 8H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| | 12H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 12H | 4H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.1 |
| | 6H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| | 8H | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |

Maximum UGR = 4.2

POLAR GRAPH



Maximum Candela = 2731.304 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)